

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF EAST)	
KENTUCKY POWER COOPERATIVE, INC. FOR)	
1) CERTIFICATES OF PUBLIC CONVENIENCE)	
AND NECESSITY TO CONSTRUCT A NEW)	CASE NO.
GENERATION RESOURCES; 2) FOR A SITE)	2024-00370
COMPATIBILITY CERTIFICATE RELATING TO)	
THE SAME; 3) APPROVAL OF DEMAND SIDE)	
MANAGEMENT TARIFFS; AND 4) OTHER)	
GENERAL RELIEF)	

COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION
TO EAST KENTUCKY POWER COOPERATIVE, INC.

East Kentucky Power Cooperative, Inc. (EKPC), pursuant to 807 KAR 5:001, shall file with the Commission an electronic version of the following information. The information requested is due on January 31, 2025. The Commission directs EKPC to the Commission's July 22, 2021, Order in Case No. 2020-00085¹ regarding filings with the Commission. Electronic documents shall be in portable document format (PDF), shall be searchable, and shall be appropriately bookmarked.

Each response shall include the question to which the response is made and shall include the name of the witness responsible for responding to the questions related to the information provided. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a

¹ Case No. 2020-00085, *Electronic Emergency Docket Related to the Novel Coronavirus COVID-19* (Ky. PSC July 22, 2021), Order (in which the Commission ordered that for case filings made on and after March 16, 2020, filers are NOT required to file the original physical copies of the filings required by 807 KAR 5:001, Section 8).

governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

EKPC shall make timely amendment to any prior response if EKPC obtains information that indicates the response was incorrect or incomplete when made or, though correct or complete when made, is now incorrect or incomplete in any material respect.

For any request to which EKPC fails or refuses to furnish all or part of the requested information, EKPC shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied and scanned material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, EKPC shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. Refer to EKPC's response to Commission Staff's First Request for Information (Staff's First Request), Item 1. The last sentence states "plan in total."

a. Explain what "plan in total" includes.

b. Clarify whether or not it includes plans discussed outside the scope of this case.

c. Identify any resource plans that have yet to be formally presented to the Commission and the estimated date for submission.

2. Refer to EKPC's response to Staff's First Request, Item 1 that references a New ERA Certificate of Public Convenience and Necessity (CPCN) to be filed in early 2025.

a. Provide the status of the CPCN filing, including the expected filing date.

b. State whether EKPC has determined which renewable resources will be included in filing. If so, describe the resources and how they conform to the current needs of EKPC.

3. Refer to EKPC's response to Staff's First Request, Item 2b. State whether EKPC currently has in place any of the "insurance products" discussed, and if so, identify the "insurance product", explain the terms of the product, and how it mitigates the risk of performance assessment interval (PAI) penalties.

4. Refer to EKPC's response to Staff's First Request, Item 2c.

a. Discuss whether the Federal Energy Regulatory Commission (FERC) has approved any recent changes to the PJM Tariff within the last five years.

b. Discuss the likely impact since the numerous 2023 Winter Storm Elliott complaints and settlement designed to reduce the overall number of PAI penalties hours in future winter storms.

c. State whether EKPC believes any such PJM Tariff changes will meaningfully reduce PAI risks.

5. Refer to EKPC's response to Staff's First Request, Item 3.

a. Assuming that FERC approves the Reliability Resource Initiative (RRI) proposal as filed, and PJM selects the Cooper Combination Combustion Gas Turbine (CCGT) and/or the Liberty reciprocating internal combustion engines (RICE) units, discuss the likely impacts on the interconnection queue timelines. State whether EKPC would be able to meet its resource adequacy goals more quickly under such a scenario compared to the status quo.

b. Explain how the FERC approval of other recent PJM resource adequacy filings impact the above-mentioned Cooper and Liberty units.

6. Refer to EKPC's response to Staff's First Request, Item 4. The response reiterates EKPC's goal to reduce greenhouse gas emission by 35 percent by 2035.

a. Explain how, and when, the 35 percent reduction goal was established.

b. Explain if EKPC estimated, when established, the potential cost to meet this goal, and, if so, provide the estimated cost. Provide any updated changes to the costs estimates since the goal was established.

7. Refer to the Direct Testimony of Jerry Purvis, page 10.

a. Confirm that there is no mention of the option to utilize carbon capture and sequestration (CCS) to remove 90% of the carbon dioxide (CO₂) from emissions.

b. Explain whether EKPC considered the CCS option.

c. If a CCS option was considered, what were the estimated costs and implications.

d. If not, explain why a CCS option was not considered.

8. Refer to EKPC's response to Staff's First Request, Item 7. Confirm that EKPC estimated that CCS installed on the Spurlock Facility could cost in excess of \$10 million. Provide the source of that estimate.

9. Refer to EKPC's response to Staff's First Request, Item 7 and Item 12b. Despite PJM determined effective load carrying capability (ELCC) values being considered summer capacity values in the base residual auction (BRA) only, from a planning/capacity modeling perspective, explain why it is not reasonable to model EKPC's unit ELCC winter values to determine its greater winter peak capacity needs.

10. Refer to EKPC's response to Staff's First Request, Item 7.

a. Explain whether EKPC's statement that its recent experience shows that it is purchasing 30-40 percent of its energy from the market means that EKPC purchased 30-40 percent of its energy over and above the energy it generated and sold into the market.

b. Provide a monthly breakdown of the energy purchases, total and net of generation sold into the market, for time period indicated by EKPC's "recent experienced."

11. Refer to EKPC's response to Staff's First Request, Item 7 and Application, Direct Testimony of Julia J. Tucker, Exhibit JJT-4. Refer also to Case No. 2024-00310² generally.

a. During EKPC's modeling and selection of the EKPC Expansion Plan – Q4 2024, explain whether the RICE units were assumed to have already been approved by the Commission.

b. Explain how RICE units compare to comparably sized aero-derivative natural gas units in terms of cost and operating characteristics.

12. Refer to EKPC's response to Staff's First Request, Items 7 and 12. Discuss the current exposure that EKPC's Owner-Members have to the most recent (2025/2026 delivery year) PJM Reliability Pricing Model (RPM) BRA in both MWs and capacity market costs (i.e., how much is EKPC short or long?).

a. Assuming timely Commission approvals of the CPCNs for the Cooper and Spurlock facilities in this case, explain which future BRAs does EKPC plan to offer these units to reduce exposure to volatile capacity prices.

b. Discuss how EKPC has an ability to hedge capacity price exposure before EKPC is in a position to offer the units into future BRAs.

13. Refer to EKPC's response to Staff's First Request, Item 8.

a. Confirm if a unit is in emergency status, whether PJM requires the unit's capacity be not counted toward EKPC's capacity obligation, and if so, explain whether EKPC is required to find replacement capacity.

² Case No. 2024-00310, *The Electronic Application of East Kentucky Power Cooperative, Inc. for 1) A Certificate of Public Convenience and Necessity to Construct a New Generation Resource; 2) A Site Compatibility Certificate; 3) Other General Relief.*

b. Explain the ongoing actions EKPC must take to maintain Cooper Unit 1 in emergency status. Include in the response the ongoing costs involved with this action and how those costs would be recovered.

c. Confirm that when a unit is in emergency status, no significant or major unit maintenance may take place.

d. Explain the timeline when PJM would call upon Cooper Unit 1 to generate power, include the estimated time necessary for the unit to initially transmit power onto the grid, and how long it would take to bring the unit up to full capacity.

14. Refer to EKPC's response to Staff's First Request, Item 13. Refer also to the Application, Direct Testimony of Julia J. Tucker, Exhibits JJT-4-5 and the Direct Testimony of Brad Young page 16, lines 7-8. Even though the four Spurlock units will be capable of burning up to 50 percent fuel gas, explain whether the RTSim production cost modeling limited the units to burn 40 percent fuel gas only for the analysis or whether the RTSim model was allowed to vary proportions of coal and fuel gas as forecast input prices varied.

15. Refer to EKPC's response to Staff's First Request, Item 17. Explain if EKPC currently holds the Capacity Injection Rights (CIR) necessary to interconnect the Cooper CCGT and the Liberty RICE units. If not, state whether EKPC is dependent upon FERC approval of the RRI proposal (including PJM selection) and/or other pending PJM filings in order to obtain them.

16. Refer to EKPC's response to Staff's First Request, Item 23.

a. Confirm that ACES Power Marketing has not conducted any forecasts or sensitivity analyses regarding coal and natural gas price changes based on

increased natural gas generation relative to coal generation and any related effects on natural gas supply and transportation. If ACES Power Marketing has conducted forecasts and/or sensitivity analyses, explain why these were not utilized by EKPC and provide the forecasts or analyses.

b. Confirm whether PJM has made any forecasts related to coal and natural gas prices based on increased natural gas generation relative to coal generation and any related effects on natural gas supply and transportation prices. If PJM has conducted forecasts and/or sensitivity analyses, explain why these were not utilized by EKPC and provide the forecasts or analyses.

17. Refer to EKPC's response to Staff's First Request, Item 26. Provide the following cost that could be applied to the EIA 2023 combined cycle natural gas (CCNG) construction estimate:

- a. Cost data for the addition of the transmission and substation.
- b. Water treatment.
- c. Deep foundations.
- d. Water storage tanks.
- e. Fuel oil tanks.
- f. The escalation rate for power plant construction from 2022 through 2024.
- g. The EIA 2023 cost was based on an H frame turbine. Recognizing the initial cost of the H class turbine is typically more than the F class turbine, explain the rationale for the higher cost estimate for the F class turbine.

18. Refer to EKPC's response to Staff's First Request, Item 32a. Explain whether the Spurlock Unit 1 output will be constrained and derated from its current full load capability when co-firing with 50 percent natural gas and 50 percent coal. If so, provide the amount.

19. Refer to EKPC's response to Staff's First Request, Item 36a. Explain whether the Spurlock Unit 2 output will be constrained and derated from its current full load capability when co-firing with 50 percent natural gas and 50 percent coal. If so, provide the amount.

20. Refer to EKPC's response to Staff's First Request, Item 40a. Explain whether the Spurlock Unit 3 output will be constrained and derated from its current full load capability when co-firing with 50 percent natural gas and 50 percent coal. If so, provide the amount.

21. Refer to EKPC's response to Staff's First Request, Item 44a. Explain whether the Spurlock Unit 4 output will be constrained and derated from its current full load capability when co-firing with 50 percent natural gas and 50 percent coal. If so, provide the amount.

22. Provide the 2022 EKPC Integrated Resource Plan (IRP).

23. State the costs of the transmission system required to support the CCGT output and explain how EKPC intends to recover the transmission system related costs.

24. Refer to the Direct Testimony of Don Mosier, page 5, lines 14-19. Provide documentation that demonstrates the instability of the transmission system during Winter Storms Gerri and Elliott.

25. Refer to the Direct Testimony of Darrin Adams, generally. Provide the detailed evaluation that EKPC utilized to document the transmission system updates that could be implemented to negate the need for new generation sources.

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DATED JAN 16 2025

cc: Parties of Record

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